

538

DART AEROSPACE LTD		Work Order: 24128
Description: Dart 13-Man Shoulder Harness Kit (205/212/214/412)		Part Number: D3195-3 D412-702-011
04.02.23 Kit		
Dwg: D3195 Rev. A; D3196 Rev. A; D3197 Rev. A		Qty: 30 Kit(s)
Ref: D412-702 Rev.A page 9		Page 1 of 4

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveler Note: D412-702-011 Kit consists of (2) D3195-041; (2) D3195-043; (1) D3196-1; (1) D3196-3; (1) D3196-4; (2) D3197-041.	U	05.08.31	30
2	DC	Photocopy bluefile and create labels per PPP D412-702-011 CHG001	N/A	05.09.15	—
3	MV	Cut (2) blanks per (1) D412-702-011 Kit Cut blanks: (0.75" x 2.00") x 3.60" long Bar Material: 6061-T6/T651 (QQ-A-200/8) or (QQ-A-225/8) or (QQ-A-250/11) (M6061T6B0.750x02.000) Identify for D3195-1 Batch:		N/A	U
4	MV	Cut (2) blanks per (1) D412-702-011 Kit Cut blanks: (1.50" x 1.25") x 3.60" long Bar Material: 6061-T6/T651 (QQ-A-200/8) or (QQ-A-225/8) or (QQ-A-250/11) (M6061T6B1.500x01.250) Identify for D3195-3 Batch: 117037	MC	05/08/31	30
5	MV	Cut blank: (0.75" x 1.50") x 26.200" long Bar Material: 6061-T6/T651 (QQ-A-200/8) or (QQ-A-225/8) (M6061T6B0.750x01.500) Identify for D3196-1 Batch:			
6	MV	Cut (2) blanks per (1) D412-702-011 Kit Cut blanks: (0.75" x 1.50") x 34.750" long Bar Material: 6061-T6/T651 (QQ-A-200/8) or (QQ-A-225/8) (M6061T6B0.750x01.500) Identify (1) for D3196-3 Identify (1) for D3196-4 Batch:		N/A	U
7	MV	Cut (2) blanks per (1) D412-702-011 Kit Cut blanks: 29.125" long Round Bar Material: 7075-T73 (QQ-A-200/11) or (QQ-A-225/9) 1" OD (M7075T73R1.000) Identify for D3197-1 Batch:			
8	MV	Machine D3195-1 as per Folio FA334 and Dwg D3195 Identify as D3195-1			
9	QC2	Inspect parts as they come off the CNC machine			
10	MV	Deburr and Tumble			
11	QC8	Second check			
12	MV	Machine D3195-3 as per Folio FA334 and Dwg D3195 Identify as D3195-3	SA	05.09.01	30
13	QC2	Inspect parts as they come off the CNC machine	SA	05.09.01	30
14	MV	Deburr and Tumble	SA	05.09.01	30
15	QC8	Second check	BC	05.09.02	30

RELEASED

07.01.08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 05/09/15

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

DART AEROSPACE LTD		Work Order:	24128
Description: Dart 13-Man Shoulder Harness Kit (205/212/214/412)		Part Number:	D412-702-011
04.02.23 5-13			D3195-3
Dwg: D3195 Rev. A; D3196 Rev. A; D3197 Rev. A		Qty:	30 Kits
Ref: D412-702 Rev.A page 9			Page 2 of 4

Step	Location	Procedure	By	Date	Qty
16	MV	Machine D3196-1 as per Folio FA339 and Dwg D3196 Identify as D3196-1			
17	QC2	Inspect parts as they come off the CNC machine			
18	MV	Deburr			
19	QC8	Second check			
20	MV	Machine D3196-3 as per Folio FA339 and Dwg D3196 Identify as D3196-3			
21	QC2	Inspect parts as they come off the CNC machine			
22	MV	Deburr			
23	QC8	Second check			
24	MV	Machine D3196-4 as per Folio FA339 and Dwg D3196 Identify as D3196-4			
25	QC2	Inspect parts as they come off the CNC machine			
26	MV	Deburr			
27	QC8	Second check			
28	MV	Machine D3197-1 as per Folio FA340 and Dwg D3197 Note: Need to be faced to size Identify as D3197-1			
29	QC2	Inspect parts as they come off the CNC machine			
30	MV	Deburr			
31	QC8	Second check			
32	FP	Chemical Conversion Coat as per QSI 005 4.1 D3195-1/-3 D3196-1/-3/-4; D3197-1	MA	05 09 07	30
33	FP	Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3 D3195-1/-3 D3196-1/-3/-4; D3197-1	FL	05 09 07	30
34	QC3	Inspect work to Step 33.	J	05 09 07	30
35	GA 04.04.05	Cut (2) blanks per (1) D412-702-011 Kit Cut blanks: (4.986" x 0.500") x 0.125" thick as per Dwg D3195 Material: D3195 Rubber - 2.500" Punch holes as per Dwg Identify as D3195-5 Batch: _____	N/A		
36	GA 04.04.05	Cut (2) blanks per (1) D412-702-011 Kit Cut blanks: (4.986" x 1.000") x 0.125" thick as per Dwg D3195 Material: D3195 Rubber - 2.500" Punch holes as per Dwg Identify as D3195-7 Batch: B20359 M/6/194	SA	05/09/13	30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

DART AEROSPACE LTD		Work Order: 24128
Description: Dart 13-Man Shoulder Harness Kit (205/212/214/412)		Part Number: D412-702-011
04.02.23 <i>Hy</i>		D3195-3
Dwg: D3195 Rev. A; D3196 Rev. A; D3197 Rev. A1		Qty: 30 Kit(s)
Ref: D412-702 Rev.A page 9		Page 3 of 4

Step	Location	Procedure	By	Date	Qty
37	GA	Bond D3195-5 into D3195-1 as per Dwg D3195 Pick: Qty _____ Description _____ Batch _____ A/R _____ Contact Cement _____ Identify as D3195-041	<i>N/A</i>		
38	GA	Bond D3195-7 into D3195-3 as per Dwg D3195 Pick: Qty _____ Description _____ Batch _____ A/R _____ Contact Cement _____ Identify as D3195-043	<i>176194</i>	<i>28 05/09/14</i>	<i>30</i>
39	QC5	Inspect work to Step 38	<i>2</i>	<i>28-05-14</i>	<i>30</i>
40	GA	Assemble (2) D3197-041 as per Dwg D3197. (Note: D3197-1 is on BOM as material from Step 7) Pick: Qty Part Number Description Batch 4 D2690-5 Lanyard _____ 2 D3197-1 Bar _____ 4 D3242-1 Tag _____ 12 AN960JD10 Washer _____ 4 DARS-004 Pip Pin _____ 4 MS21042L3 Nut (or -3) _____ 4 MS27039-1-24 Bolt SCREW <i>404129</i> _____ Identify as D3197-041			
41	QC5	Inspect work to Step 40			
42	KP	Pick: Packing Kit (Note: D3195-041/-043, D3196-1/-3/-4 are on BOM as material from Steps 3-6, 35-36) Qty Part Number Description Batch 2 D3195-041 Bracket _____ 2 D3195-043 Bracket _____ 1 D3196-1 Bar _____ 1 D3196-3 Bar _____ 1 D3196-4 Bar _____ 2 D3197-041 Bar _____ 4 D3198-1 Fitting _____ 18 D3215-041 Harness Assembly _____ 4 D3215-043 Harness Assembly _____ 4 AN4-5A Bolt _____ 4 AN4-13A Bolt _____ 8 AN4-20A Bolt _____ 20 AN960JD416 Washer _____ 12 MS21042L4 Nut (or -4) _____ 8 MS24694-S152 Screw _____ 2 D3268-1 Placard _____	<i>N/A</i>		
43	QC4	Inspect Kit 100% for Completeness on the W/O			
44	PK	Identify and pack for shipping as per PPP D412-702-011 <i>ID + stock</i>	<i>DL</i>	<i>05/09/14</i> <i>05/09/14</i>	<i>30</i>

RELEASED

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

DART AEROSPACE LTD		Work Order:	24/28
Description: Dart 13-Man Shoulder Harness Kit (205/212/214/412)		Part Number:	D3195-3 D412-702-011
04.02.23			
Dwg: D3195 Rev. A; D3196 Rev. A; D3197 Rev. A		Qty:	30 Kit(s)
Ref: D412-702 Rev.A page 9			Page 4 of 4

Step	Location	Procedure	By	Date	Qty
45	AC	Cost / part 15.46	SUC	05-09-15	30
46	DC	Close W/O, 4.67 Inspect Level 21	05/09/15	30	

Rev	Date	Change	Revised By	Approved
A	03.10.17	New issue	KJ/RF	

RELEASED
04.01.08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

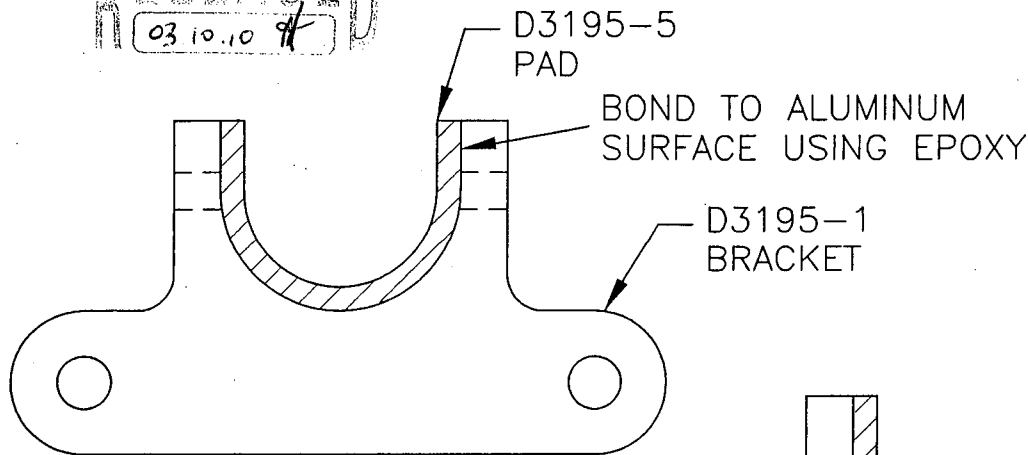
NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

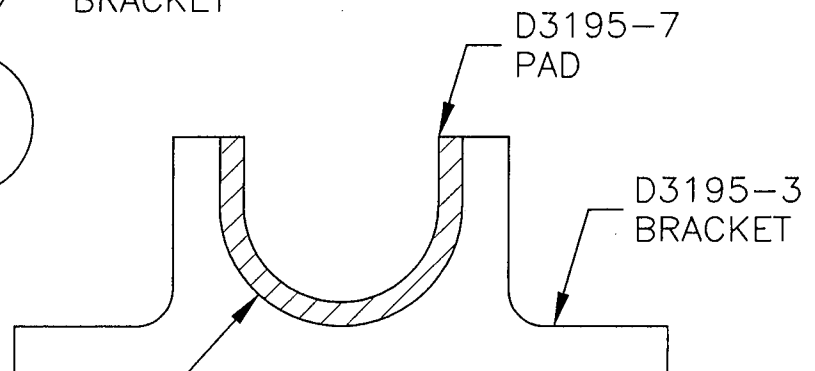


DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3195	REV. A SHEET 1 OF 3
DATE 03.06.23		TITLE BRACKET	SCALE 1:1
A	03.06.23	NEW ISSUE	SHOP COPY RETURN TO ENGINEERING

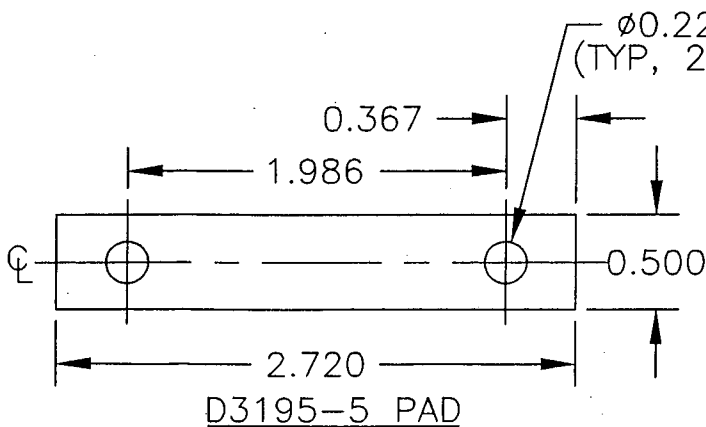
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03.10.10 *#*



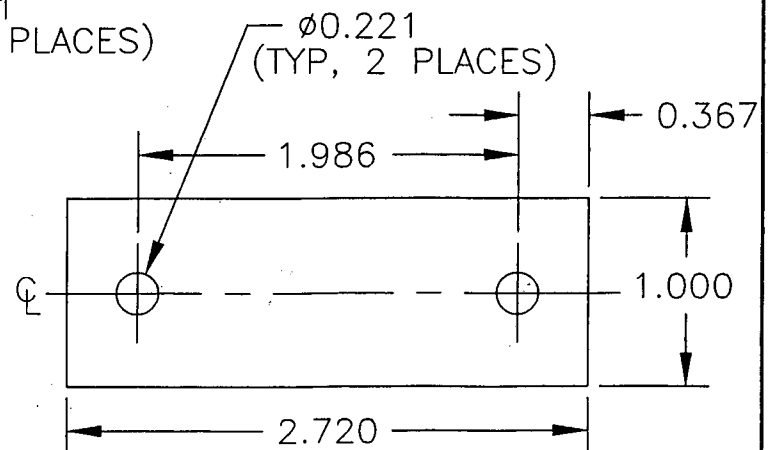
D3195-041
BRACKET



D3195-043
BRACKET



D3195-5 PAD



D3195-7 PAD

D3195-5 & D3195-7 PAD

- 1) MATERIAL: 60 DUROMETER NEOPRENE 1/8" THICK
(POSSIBLE SUPPLIERS, ACCURATE RUBBER)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 3) ALL DIMENSIONS ARE IN INCHES

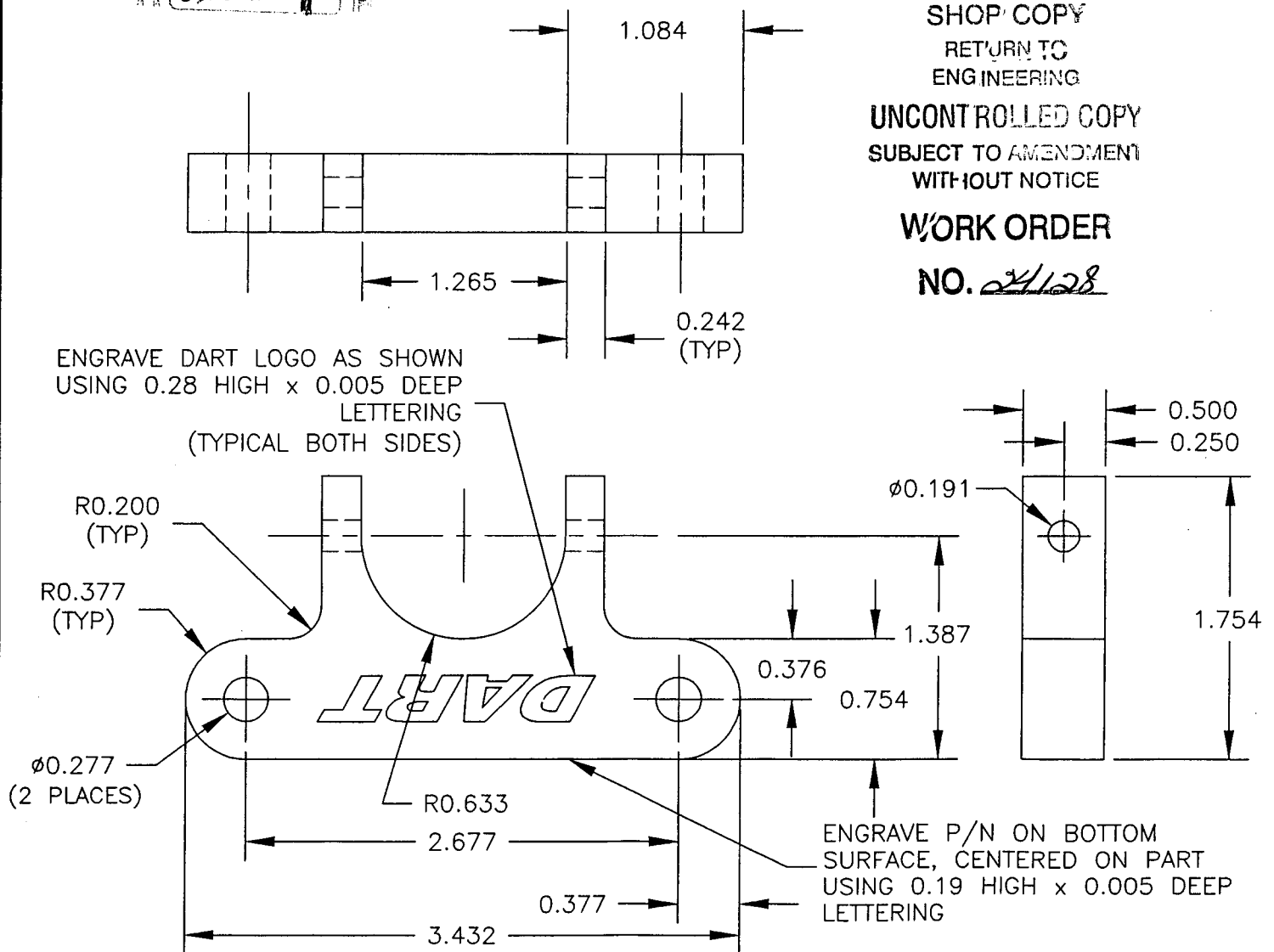
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3195	REV. A SHEET 2 OF 3
DATE 03.06.23		TITLE BRACKET	SCALE 1:1

RELEASED
03.10.10



D3195-1 BRACKET

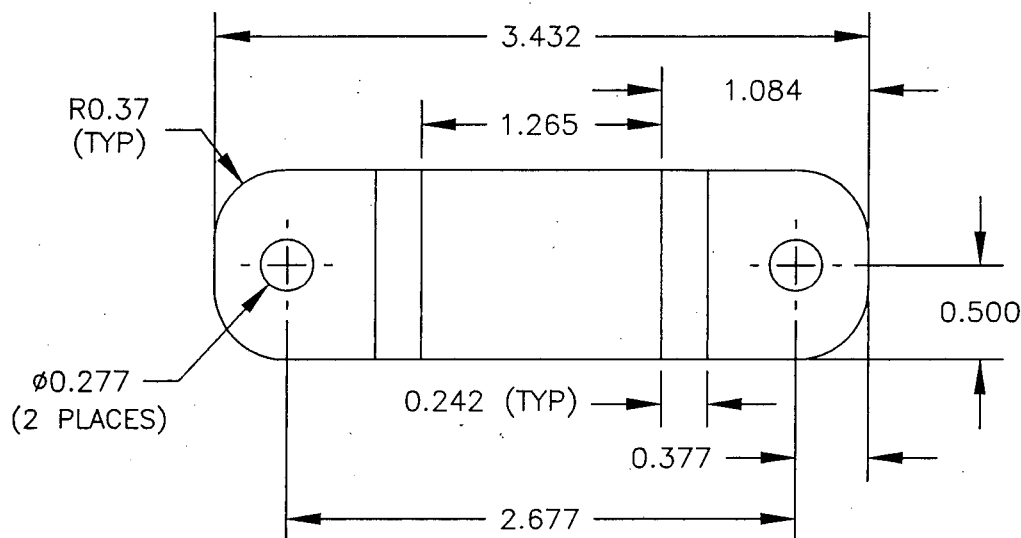
- 1) MATERIAL: 6061-T6/T651 (QQ-A-250/11 OR QQ-A-200/8 OR QQ-A-225/8)
(REF. DART SPEC M6061T6S OR M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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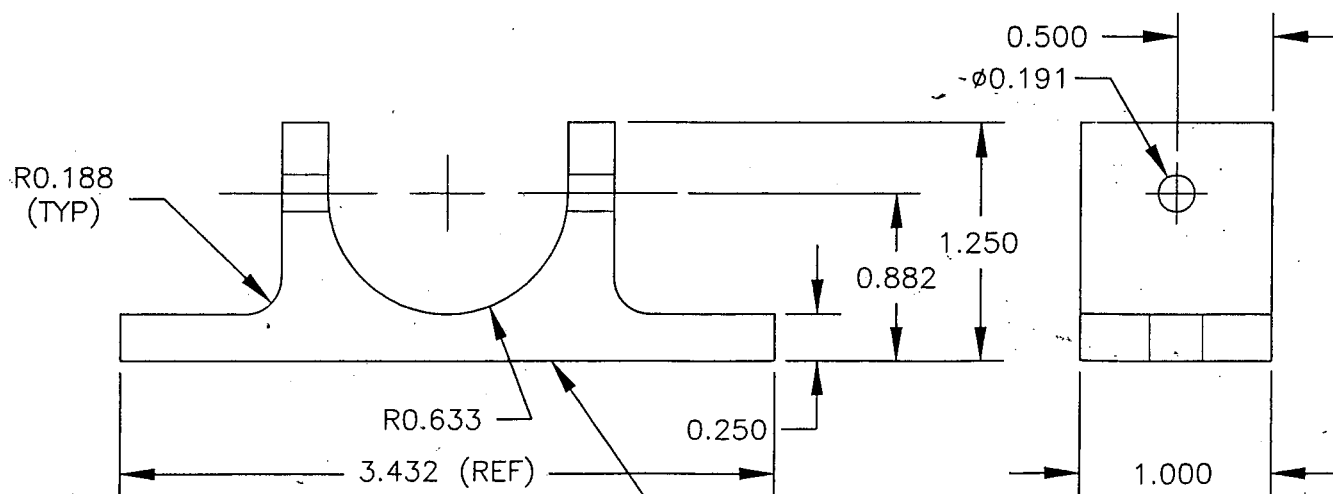
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CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3195	REV. A SHEET 3 OF 3
DATE 03.06.23		TITLE BRACKET	SCALE 1:1



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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 24128



RELEASED
03.10.10

ENGRAVE P/N ON BOTTOM
SURFACE, CENTERED ON PART
USING 0.19 HIGH x 0.005 DEEP
LETTERING

D3195-3 BRACKET

- 1) MATERIAL: 6061-T6/T651 (QQ-A-250/11 OR QQ-A-200/8 OR QQ-A-225/8)
(REF. DART SPEC M6061T6S OR M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

DART AEROSPACE LTD		Work Order:	24128
Description: Bracket		Part Number:	D3195-3
Inspection Dwg: D3195 Rev: A		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.432	+/-0.010	3.435	/			
1.265	+/-0.010	1.264	/			
R0.37	+/-0.030	.37	/			
Ø0.277	+0.005/-0.000	Ø.279	/			
2.677	+/-0.005	2.679	/			
0.242	+/-0.010	.242	/			
0.377	+/-0.010	.378	/			
0.500	+/-0.010	.502	/			
R0.188	+/-0.010	.188	/			
0.250	+/-0.010	.249	/			
0.882	+/-0.010	.880	/			
1.250	+/-0.010	1.251	/			
0.500	+/-0.010	.499	/			
Ø0.191	+0.005/-0.000	Ø.1925	/			
1.000	+/-0.010	1.002	/			

Measured by: SA	Audited by: BG	Prototype Approval:	N/A
Date: 05.09.01	Date: 05.09.02	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.04.20	New Issue (P/O D412-702-011/-013)	KJ/RF	
B	05.04.26	R0.37 was R0.037; 1.084 removed	KJ/JLM	

RELEASED
05.05.03

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Aug 30, 2005
07:42 am

Work Order No : 0024128
Project Name : D3195-3
Project For : WK538
Work Order Type : Main
Main WO Number :
House Part Number : D3195-3
Description : Bracket
Manufactured : Yes
Amount Req'd : 30
Amount Done : 0
Start Date : 08-29-05
Est Finish Date : 09-21-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Mark Up : 0.000%
Actual Mark Up : 0.000%
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00